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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/767,346	01/30/2004	Paula Calabrese	245046US6 YA	5236

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EXAMINER

KIM, PAUL L

ART UNIT	PAPER NUMBER
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2857

DATE MAILED: 06/17/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/767,346

Applicant(s)

CALABRESE ET AL.

Examiner

Paul Kim

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 January 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-27 and 29-34 is/are rejected.
- 7) ☒ Claim(s) 21, 28 and 33 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Objections

1. Claim 21 is objected to because of the following informalities: The preamble discloses "A method for disposing of a consumable part". However the body of the claim does not set forth any "disposing" steps. Appropriate correction is required.

Claim 33 is objected to because the word "exposure" is misspelled.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1-4, 7-14, and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Plettner et al in view of Freed et al.

With regard to claims 1 and 9-12, Plettner et al teaches an electronic monitoring device for monitoring chemical exposures of a product comprising: a non-volatile memory unit dedicated to the consumable part and configured to store a history of chemical exposures (col. 2, lines 1-5), a processor connected to the memory and configured to communicate with the memory to store the history, and a power supply circuit connected to the memory and processor and configured to transfer power to the memory and processor (see figure and summary). Plettner et al teaches the device being used for a variety of products (col. 5, lines 7+) but does not specify the device

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being used to monitor a consumable part of a semiconductor-processing tool. Freed et al teaches a monitoring device in which a sensor is located inside a wafer processing tool to record data relating to processing, downloading data from a controller, and storing the data in memory (abstract & fig. 2). Since it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations (Ex Parte Masham, 2 USPQ F.2d 1647 (1987)), it would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Plettner et al, so that the device is used in semiconductor processing equipment, as taught by Freed et al, in order to derive the benefit of a versatile device that can be implemented in a variety of systems.

With regard to claims 2 and 20, Plettner et al teaches a sensor being used to sense a gaseous environment (col. 2, lines 1-5).

With regard to claims 3 and 4, Plettner et al teaches a chip package attached or embedded in the consumable part (col. 2, lines 24-48).

With regard to claim 7, Plettner et al teaches an identification being associated with the consumable part (col. 3, lines 33-35).

With regard to claim 8, Plettner et al does not specify data being sent wirelessly. Freed et al teaches data being sent to and from the memory unit wirelessly (col. 3, lines 30-35). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Plettner et al, so that data is being sent wirelessly, as taught by Freed et al, in order to be able to communicate information from an enclosed area.

With regard to claims 13 and 14, Plettner et al teaches a battery configured to supply power to the circuitry (col. 2, lines 39-43).

4. Claims 5 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Plettner and Freed et al in view of Kishkovich et al.

Plettner et al teaches the device being attached to the consumable part but does not specify the device being used outside the part. Kishkovich et al teaches a sensing device that monitors the performance of a consumable part by sensing the environment away from the part (abstract). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Plettner et al, so that the device is used outside of the consumable part, as taught by Kishkovich et al, so as to derive the benefit of increased flexibility by being able to record exposures at different locations for better recording performance.

5. Claims 15-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Plettner et al and Freed et al in view of Usui et al.

With regard to claims 15 and 16, Plettner et al does not specify the device receiving power from an RF field within a plasma-processing tool. Usui et al teaches a semiconductor-processing device configured to receive radiofrequency power in a plasma tool (§ 36). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Plettner et al, so that the source receives power from radiofrequency power, as taught by Usui et al, so as to derive the benefit of receiving a convenient source of power.

With regard to claims 17-19, Plettner et al does not specify ports being used to provide communication. Usui et al teaches the device using ports to communicate information (fig. 1, part 126). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Plettner et al, so that ports are used, as taught by Usui et al, so as to be able to communicate information with external devices.

6. Claims 21-34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Plettner et al in view of Freed et al.

With regard to claims 21, 24, 29, 30, and 34, Plettner et al teaches a method of monitoring comprising: acquiring data associated with chemical exposures of a consumable part (col. 2, lines 1-5), storing in a non-volatile memory the history of chemical exposures, and reading the history of the exposures to identify the history of exposure that the part was exposed to (see figure, summary, and col. 4, lines 32-43), and disposing of the consumable part based on the exposures identified from history (col. 4, lines 8 & 9). Plettner et al, however, does not specify the device being used to monitor a consumable part of a semiconductor-processing tool. Freed et al teaches a monitoring device in which a sensor is located inside a wafer processing tool to record data relating to processing, downloading data from a controller, and storing the data in memory (abstract & fig. 2). Since it has been held that a recitation with respect to the manner in which a claimed apparatus is intended to be employed does not differentiate the claimed apparatus from a prior art apparatus satisfying the claimed structural limitations (Ex Parte Masham, 2 USPQ F.2d 1647 (1987)), it would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Plettner et al, so

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that the device is used in semiconductor processing equipment, as taught by Freed et al, in order to derive the benefit of a versatile device that can be implemented in a variety of systems.

With regard to claims 22 and 23, Plettner et al teaches a sensor being used to sense a gaseous environment of the consumable part (col. 2, lines 1-5).

With regard to claim 25, Plettner et al teaches transferring data from the part to the memory unit (col. 2, lines 23-25).

With regard to claims 26 and 31, Plettner et al does not specify data being sent wirelessly. Freed et al teaches data being sent to and from the memory unit wirelessly (col. 3, lines 30-35). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify Plettner et al, so that data is being sent wirelessly, as taught by Freed et al, in order to be able to communicate information from a totally enclosed area.

With regard to claims 27 and 32, Plettner et al teaches data being transmitted to the memory by wire (col. 4, lines 24-30).

With regard to claim 33, Plettner et al teaches toxic exposure levels being identified (col. 2, lines 1-5).

Allowable Subject Matter

7. Claim 28^{is} objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

8. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Both Kerr et al and Suermondt et al teach a method of recording environmental history of a part or device.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Paul Kim whose telephone number is 571-272-2217. The examiner can normally be reached on Monday-Thursday 10:00-6:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Marc Hoff can be reached on 571-272-2216. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9306 for regular communications and for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

PK
June 9, 2005


MARC S. HOFF
SUPERVISORY PATENT EXAMINER
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